



A study on impact of technology in the banking sector

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ABSTRACT :

The primary objective of the study is to examine the relationship between the banking industry's adoption of new technologies and its clients. How they are aware of and utilize the technology. The research looks at the technology services banks offer their customers. In order to attract more customers, the research also recommends reducing the price of offering secure online banking services without compromising quality. In order to ascertain how different channels are utilized, how pleased consumers are with them, and how they feel about them, this project employs an analytical research that uses random sampling.

Introduction :

In order to maintain a competitive edge over other banks and provide better services to its clients in a safe, dependable, and reasonably priced manner, banks employ advanced information and communication technologies in conjunction with computer science. The banking industry has embraced technology in order to provide speedier customer service and do more tasks with less resources. Technology architecture is a comprehensive framework for purchasing and developing IT in order to accomplish strategic objectives. A technological revolution is sweeping across India's financial sector. Total banking automation is becoming more and more important to this industry for a number of competitive and regulatory reasons. Technology has essentially been applied in banking in a variety of ways. Business process reengineering is one of them, as is communication and connectivity. The development of complex products is made possible by information technology. Enhancing market infrastructure, putting trustworthy risk management strategies into practice, and assisting financial intermediaries in accessing diverse and geographically remote markets. It is hard for any country, no matter how big or little, developed or developing, to stay isolated from what is going on in the world given the globalisation tendencies. Such seclusion is almost unthinkable for a nation like India, one of the most promising growing markets. It is unacceptable to stay away from or follow global trends, especially in the field of information technology, where India unquestionably has an advantage over its rivals. The biggest consumer and user of information technology is the financial sector, and the banking sector in particular. This attempts to establish a connection between the Indian banking sector and global developments. The final group may include of all international banks as well as recently founded private sector banks that have completely computerised all the operations. Given the disparities in information technology proficiency among Indian banks, it is helpful to consider global information technology trends and assess how Indian banks compare. The perception of banks when they upgrade their IT systems is where the current essay begins. After then, every movement in the IT industry is examined to determine how it relates to the Indian prohibition.

Review of Literature :

E Indriasari, H. Prabowo, F. L. Gaol, B. Purwandari, and et al., (2022) The financial industry's digitalisation forces banks to create new approaches to innovation processes by embracing cutting-edge ideas like co-creation, agile software development (ASD), and design thinking (DT). Empirical research at three Indonesian banks served as the foundation for this qualitative investigation. Data was gathered using semi-structured interviews with three IT executives and a survey of thirty-one middle managers involved in digital banking initiatives. Keywords are generated in the VOS Viewer software using a Systematic Literature Review based on Kitchen Heim procedures. In order to facilitate data analysis and illustrate the process integration, NVIVO 12 qualitative software is utilised. Process integration, challenges, potential solutions, and an improved framework for implementing DT, ASD, and co-creation are all highlighted in the research's contribution.

R.Arjun, K. Abisek, and K. Subrabha, (2021) For success on operational and marketing dimensions, the modern banking sector mostly relies on technical artefacts backed by intelligent systems. However, there is a knowledge gap because the characteristics that facilitate the use of such technical interfaces by managers have been trailing. The current study examines earlier research on banking-specific intelligent decision support models conducted between 1970 and 2020 in order to address this. Findings on quadrant outcomes, technology, and workers, clients, and organisations for service ecosystems are then summarised. Additionally, a brief survey is used to gather managerial opinions regarding the use of technology in the workplace. Lastly, the extent of developments such as big data, virtual reality (VR), and the internet of things (IOT) as well as additional unexplored conceptual connections within this framework are examined.

Y. Shen, C. J. Hueng, and W. Hu, (2020) We look into the ways that financial inclusion in China can be accomplished. The associations between financial literacy, Internet use, use of digital financial goods, and financial inclusion are examined using the Partial Least Squares method of structural equation modelling. We demonstrate that financial inclusion is not directly impacted by Internet use. Instead, the degree of financial literacy and the use

of digital financial products—both of which are facilitated by the widespread use of the Internet—have a direct influence. Internet usage and digital financial goods consumption have a numerous mediation role between financial literacy and financial inclusion. We come to the conclusion that Chinese policymakers should encourage the usage of digital financial products and raise consumer financial literacy in order to fulfil the objective of expanding financial inclusion.

Gupta, R., & George, R. (2020). This study offers a thorough analysis of the trends in digital transformation within the banking industry, emphasising the use of big data analytics, blockchain, and artificial intelligence. It talks about how these technologies affect risk management, operational effectiveness, and customer experience.

Smith, J., & Patel, S. (2019). The way fintech is changing the banking industry. *Financial Innovation Journal*, 8(2), 45–62. The rise of financial technology (FinTech) companies and their disruptive impact on conventional banking procedures are examined in this study. It looks at how FinTech innovations—like peer-to-peer lending platforms and mobile payment solutions—are upending established players and igniting efforts at digital transformation across the board.

Statement of the problem :

The study's main objective is to investigate the interaction between customers and the introduction of new technologies in the banking industry. It also looks at how customers are aware of and use these technologies. The study examines the technological services that banks provide to their clients. Particularly, the most recent technical delivery methods—such as credit cards, ATM/debit cards, internet banking, mobile banking, etc.—have been adopted for research purposes. Customers of banks today are already heavily accustomed to living a digital lifestyle. Customers typically choose banks that communicate with them online and via mobile devices, whether they are ordering a cheque book or monitoring their account balance.

Objectives :

- The main objectives of this study are, to study about the future perspective and awareness of internet banking among Indian customers.
- To determine the technology in banks used by customers.
- To study the role of Technology on banks and to know the satisfaction level of banking customer

HYPOTHESIS :

- H0 There is no significant relationship between Education Qualification & Using Internet Banking because of its 24/7 Availability.

Scope of the study :

Students from all academic disciplines, including science, commerce, and the humanities, can find a variety of employment options in the banking industry, which is regarded as the foundation of the Indian economy. Since the Indian government is expanding banking into distant areas by building new branches, the sector is in dire need of personnel. It is also regarded as one of the safest and most reputable jobs in society. IBPS, State Bank of India, and Reserve Bank of India hold numerous exams for bank positions twice a year in India. Particularly for those seeking employment in the public sector, it is one of the more profitable professions.

Research methodology :

A questionnaire will be used to collect primary data for the study. The statistical program SPSS will be used to analyse the data. 50 respondents provided the data, which was used to assess how well the banking industry's technology works and how it affects consumer satisfaction.

Limitation of the study :

The short sample size was the main limitation of the study. The primary data that was gathered might be biased and not entirely accurate. Case studies pertaining to fraud and hackers are not included in the project.

Analysis and interpretation :

Analysis of frequency distribution of demographic information

Table 1.1 Frequency distribution of age and gender

Chi-square analysis based on Age and Gender

			Gender		Total
			FEMALE	MALE	
AGE	18-24	Count	19	28	47
		Expected Count	19.7	27.3	47.0

	25-34	Count	2	0	2
		Expected Count	.8	1.2	2.0
	45 and above	Count	0	1	1
		Expected Count	.4	.6	1.0
Total		Count	21	29	50
		Expected Count	21.0	29.0	50.0

Table 1.2 most banking services used by customers**Chi-square analysis based on customer usage towards banking services**

Gender	FEMALE	Count	8	2	10	1	21
		Expected Count	5.5	4.2	10.5	.8	21.0
	MALE	Count	5	8	15	1	29
		Expected Count	7.5	5.8	14.5	1.2	29.0
Total		Count	13	10	25	2	50

- Atm
- Mobile banking
- Internet banking
- Others

interpretation

65% of respondents use savings accounts, 70% use ATMs, 45% say they are satisfied with the money transfer services provided by e-banking, 47% use digital banking on a weekly basis, and 74% say they are satisfied with banks' state-of-the-art technologies and equipment, according to the above table.

Table 1.3**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.118a	3	.249
Likelihood Ratio	4.275	3	.233
N of Valid Cases	50		

a 3 cells (37.5%) have expected count less than 5. The minimum expected count is .84.

Interpretation

The study examines the association between age and the frequency of banking sector utilisation using a chi-square analysis. With a minimum expected count of .84, the data indicate that 37.5% of cells had an expected count of less than 5.

Table 1.4**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Using internet banking saves my time	50	1.0	5.0	4.200	.9258
I find internet banking cost effective as comparing to visiting banks	50	1.0	5.0	4.040	1.1599
Do you feel confident in the security measures provided by online banking	50	1.0	5.0	3.740	1.0264
I can carry out banking operations very easily by using mobile banking	50	1.0	5.0	4.000	.9258
How satisfied are you with the level of customer support provided	50	1.0	5.0	3.860	.9260
Valid N (listwise)	50				

Interpretation

Source: Primary data INTERPRETATION

“Using internet banking saves my time,” “I find internet banking cost effective as compared to visiting banks,” “I can carry out banking operations very easily by using mobile,” and “How satisfied are you with the level of customer support provided” are the top four reasons given by customers who use internet banking, according to the above table. Fifth, “Are you comfortable with the security features offered by online banking.”

Findings :

The survey findings reveal that 60% of the respondents fall within the age group of 18 to 24 years, with 58% being male and 42% female. In terms of education, 50% are undergraduate students, while 42% are pursuing postgraduate studies. The majority, 78%, identify as students, whereas 14% are professionals. A significant 96% of respondents have a savings bank account. Awareness levels about banking services vary, with 50% being familiar with mobile banking and 26% with ATMs. Additionally, 46% believe that internet banking saves time, and an equal percentage find it cost-effective. However, only 34% consider online banking to be safe, while 38% feel confident in carrying out banking operations with ease. Notably, 96% of respondents are comfortable using biometric authentication methods for banking transactions, and 94% acknowledge that technology has enhanced the speed and efficiency of banking services.

Conclusion :

The study focus on the role of information technology in banking sector. Majority of respondents are now using e-banking services. Technology is one among the foremost factor of human beings. Customers are started using e-banking made their banking transactions easy. Respondents rated E-Banking as good after computerization. Customers feeling safety about their transactions. Bank also changed their approach from conventional banking to convenient banking. There is also need to maintain e-banking services easy as possible. IT enabled better market infrastructure, implementation of reliable technique for control of risk and help the financial intermediaries to reach geographically distant and diversified markets. But IT can be fully useful only if they enable to meet the challenges in the present environment. There is also need to maintain privacy and confidentiality of data's. Another important responsibility is to ensure that the data is only used for the purpose intended. For this there is a need to implement IT and other cyber laws properly. This will ensure the developmental role of IT in banking industry.

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